



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

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GOVERNOR

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**North Carolina Board of Transportation  
Environmental Planning and Policy Committee  
Meeting Minutes for July 10, 2002**

A meeting of the Environmental Planning and Policy Committee (EPPC) was held on July 10, 2002 at 8:00 AM in the Board Room (Room 150) of the Transportation Building. Nina Szlosberg chaired the meeting. Other Board of Transportation members that attended were:

Mac Campbell  
Marion Cowell  
Doug Galyon  
Clark Jenkins

Frank Johnson  
Cam McRae  
Nina Szlosberg  
Lanny Wilson

Other attendees included:

Rob Ayers  
Donnie Brew  
Roberto Canales  
Greg Dean  
Steve DeWitt  
Lisa Glover  
Rob Hanson  
Mike Holder  
Julie Hunkins  
David Hyder  
Pat Ivey  
David King

Neil Lassiter  
Don Lee  
Sharon Lipscomb  
Carl McCann  
Ehren Meister  
Ashley Memory  
Mike Mills  
Jon Nance  
Sandy Nance  
Blake Norwood  
Ken Pace

Benton Payne  
Allen Pope  
Lubin Prevatt  
Ken Putnam  
Ruth Sappie  
Andres Serrano  
Tom Sopko  
Charles Tomlinson  
Jim Trogden  
Steve Varnedoe  
Beverly Williams

Ms. Szlosberg called the meeting to order. After opening remarks, Ms. Szlosberg accepted a motion to approve the minutes, as presented at the meeting, from the June 5, 2002 EPPC meeting. The motion was approved.

Mr. Dan Thomas of NCDOT's Statewide Planning Branch presented information about the format of the new transportation plan map that is required as a result of recent legislation. Transportation plans are now required instead of the thoroughfare plans, and Mr. Thomas has been working with staff throughout the department to develop a transportation plan format. Mr. Thomas has coordinated the development of the format for the plan with PDEA, division engineers, Office of Bicycle and Pedestrian, and MPO Association. Through this coordination, Statewide Planning has developed a proposed format for the transportation plan. The purpose of his presentation is to obtain feedback from the Committee about the proposed format. Mr. Thomas will be going

to several of the Board of Transportation committees in July and August to explain the format of the map and to receive input.

The plan will be multi-modal in nature. The proposed format for the plan consists of five layers. The sheets and what will be contained on each is outlined below:

#### **Sheet 1 – Cover Sheet**

- Area working with
- Identifies the date of approvals by DOT and local area
- The dates and sheets of any subsequent revisions

#### **Sheet 2 – Highway Map**

- Categories of thoroughfares based on the access planned for the future with three levels in each category (existing, proposed and “needs improvement”)
  - Freeways and Interstate highways
  - Median control facilities with an ultimate goal for interchanges at major intersections
  - Access controlled, median facilities with limited access with median breaks no closer than 1000 feet
  - Any other type of road with no access control

#### **Sheet 3 – Public Transportation and Rail and Operational Strategies Map**

- Existing and proposed bus routes
- Existing and proposed fixed guideway facilities
- High speed rail corridors
- Active and inactive rail corridors
- Existing and proposed rail stops
- Intermodal connectors
- Park and ride lots
- HOV lanes
- Strategies promoting more than single occupancy vehicles

#### **Sheet 4 – Bicycle Map**

- On-road existing facilities
- On-road “needs improvement” routes
- On-road “proposed” routes (for future use)
- Off-road existing routes
- Off-road proposed routes (for future use)

#### **Sheet 5 – Pedestrian Map**

- Local plan for pedestrian facilities

The committee members asked questions and made the following suggestions. The staff’s response at the meeting is also noted in italics.

- Distinguish between passenger and rail freight lines

*Statewide Planning will look into this.*

- Use this transportation plan format for RPO's as well  
*The format can be used for RPO's as well as MPO's.*
- Provide maps in a web-based format  
*Consideration is being given to various user formats of the map, including the web, CD and hard copy format.*
- Consider "see-through" layering for hard copies so that all multiple layers can be seen simultaneously  
*The use of mylar or similar "see through" sheets for hard copies is likely to be a very expensive format for use. However, Statewide Planning continues to investigate hard copy and electronic formats so that the product is effective and cost-efficient.*
- Ms. Szlosberg recommended that the new transportation planning process map include a layer that contains the environmental landscape (watershed, wetlands, critical habitat, etc.) She noted that it was important that this information be provided at the front end of the process so that we avoid environmental problems later. She noted it was important that decision-makers see how the transportation system (existing and proposed) relates to the environment.  
*The environmental landscape will be included as part of a report or document that is used as part of the decision-making process and supports the transportation plan. The reason the environmental landscape is not proposed as a part of the transportation plan is that the transportation plan is what would be adopted, not the environmental features of an area.*

Mr. Thomas asked that the committee consider the adoption of levels of access as part of the transportation plans and the implication on land development patterns in the local areas. The transportation plan should be consistent with local land use plans. If an area indicates that it wants a particular type of development along a corridor, then the improvements NCDOT makes in a particular corridor should be consistent with the local area land use plan. Mr. Lanny Wilson suggested that this issue be considered by the Access Management Committee to address questions and concerns and obtain recommendations from that committee.

Nina Szlosberg introduced Andres Serrano and Thomas M. Sopko of Lubrizol Corporation to discuss how cleaner burning fuels can help improve air quality. After providing an overview of Lubrizol Corporation, Mr. Serrano talked about PuriNOx<sup>™</sup>, which is a low-emission diesel fuel system. He pointed out that their product is not diesel, but rather a diesel emulsion that reduces nitrous oxide (NOx) and particulate matter (PM). The emulsion includes water and uses a lower combustion temperature that, in turn, reduces the formation and emission of NOx. Water also changes the combustion process by making the mist produced by diesel engines much finer and, therefore, reduces particulates and the amount of smoke released into the atmosphere.

Emulsified fuels can be implemented rather quickly because the diesel engines remain the same. The only changes that are required are changing fuel filters, minor modifications to fueling distribution facilities, and use of the emulsified fuel.

Benefits expected from emulsified fuel include between 16 to 32 % reduction in NOx emissions and 26 to 70% reduction in PM, depending on the type of equipment and use. Emulsified fuels also significantly reduce the amount of "black smoke" typically seen by the use of traditional diesel fuel. Caltrans and the Texas Department of Transportation are both using PuriNOx<sup>™</sup>.

Lubrizol Corporation performed an analysis of the use of the fuel in the south coast air quality management district of California (in the Los Angeles area) to determine the improvement in air quality improvement if 25% of the vehicles that are centrally fueled in that area used this alternative fuel. The results reported reflect the amount of reduction of the amount of those particular vehicles were:

- Decrease in NOx by 19%
- Decrease in PM by 54%
- Decrease of ozone by 14%
- Decrease of toxic air contaminants of 30%

Two drawbacks of this fuel are that it costs more (about 25 cents more per gallon for the end user, based on an analysis of its use in California) and the efficiency is reduced over conventional diesel fuel.

In addition to the environmental benefits realized from the use of such fuels, many countries and states with the United States are offering tax reductions. Lubrizol is currently working to obtain fuel registration by the US Environmental Protection Agency by September 2002.

Ms. Szlosberg suggested that a committee be created to make recommendations to the Board regarding the implementation of the use of alternative fuels to reduce emissions in the NCDOT fleet. Board member Clark Jenkins made a motion to establish such a committee. The motion was seconded by Marion Cowell and Frank Johnson and carried without objection. Steve Varnedoe stated that NCDOT currently uses some alternative fuels and agreed to present that information to the committee in the near future.

Ms. Szlosberg asked if there was any other business that needed to come before the committee. Mr. Clark Jenkins asked that a qualified scientist provide two pieces of information as it relates to degradation of the Neuse River downstream of the Raleigh area. Mr. Jenkins stated that the City of Raleigh has been fined significantly for several years of dumping into the Neuse River. First, Mr. Jenkins would like to know the equivalent number of acres of wetlands that would have to be destroyed in eastern North Carolina to equate to the damage to the Neuse River by the dumping by the City of Raleigh. The second piece of information requested is the equivalent number of acres of wetlands that would be impacted by the sediment flowing into the Neuse River in the Wake County area as a result of development and construction activities.

The next meeting for the Environmental Planning and Policy Committee is scheduled for Wednesday, August 7, 2002 at 8:00 AM in the Board Room (Room 150) of the Transportation Building.

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